

REMARKS/ARGUMENTS

The Examiner is thanked for their review of the application.

Claims 1-4, 9, 14-19, 25-28 remain in this application. Claims 1-3, 14-16 have been amended. Claims 5, 6, 10 and 11 have been canceled without prejudice or disclaimer of the subject matter within. Claims 29 and 30 have been added. No new matter has been added.

In the Office Action dated April 18, 2007, the Examiner has rejected Claims 5, 10 under 35 U.S.C. § 101 stating that they “appear to be a mixing of two distinct statutory classes of invention.” Also in the same Office Action the Examiner has rejected Claims 5,10 under 35 U.S.C. § 112, second paragraph, as being “infinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.” The Examiner stated “it is not clear if these claims are apparatus claims or method claims. . . Is the data source being claimed as part of the invention?” Also in the same Office Action the Examiner has rejected Claims 5 and 10 under 35 U.S.C. § 112, first paragraph, stating “‘new data source’ . . . appears to be new matter.”

Dependent Claim 5, 6, 10 and 11 have been cancelled without prejudice or disclaimer of the subject matter within. All rejections pertaining to Dependent Claims 5 and 10 are moot in light of recent cancellations.

In the same Office Action the Examiner also rejected Claims 1-6, 9-11, 14-19, 25-28 under 35 U.S.C. § 112, first paragraph, “as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.”

Regarding this rejection the Examiner has stated that “For claims 1,14, the limitation that the rule prioritizer is configured to ‘*iteratively prioritize*’ a plurality of relaxable rules is considered to

be new matter. . . . That process seems to be iterative, but not the process of prioritizing the rules, which is done by the user of the system.”

Also, in the same Office Action the Examiner has rejected Claims 1-6, 9-11, 14-19, 25-28 under 35 U.S.C. § 112, second paragraph, as being “infinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.”

Regarding claims 1, 14, the Examiner stated that “it is not too clear as to what the language ‘*configured to iteratively prioritize a plurality of relaxable rules*’ is supposed to be claiming (same is true for the similar language of claim 14). What does it mean to “iteratively prioritize” the rules? This is not clear . . . Claim 1 is considered indefinite.”

Base Claim 1 has been amended to recite, in relevant part: “a rule prioritizer configured to prioritize the plurality of relaxable rules, and for identifying at least one lower priority infeasible rule from the plurality of relaxable rules;”

Likewise, Base Claim 14 has been amended to recite, in relevant part: “prioritizing, using the computer system, the plurality of relaxable rules; identifying, using the computer system, at least one lower priority infeasible rule from the plurality of relaxable rules;”

Applicants assert that the word “iteratively” is the source of confusion, indefiniteness and apparent new material of the Base Claims 1 and 14. The Base Claims 1 and 14, as amended, have the term “iterative” removed as a limitation, and are now in compliance with 35 U.S.C. § 112 second paragraph and first paragraph.

Regarding claims 2, 15 under 35 U.S.C. § 112, second paragraph, the Examiner stated that “the newly added language at the end of the claim that reads ‘*and wherein the selected no more than N products has the largest impact on the optimization of prices of any subset of no more than N products of the plurality of products*’ is indefinite. The claim recites that the product designator ‘enables’ a number N to designated, and the product designator selects no more than N products. What are the products that will have the largest impact on the optimization of prices of any subset of

no more than N products of the plurality of products? One wishing to avoid infringement would have no idea what products are defined by this language and which products are not defined by this language. This renders the claim indefinite. Also, if one were doing an optimization for prices, how would you know what products will have the largest impact on the optimization of prices? This is like knowing the answer before the program is allowed to run. This does not seem to make any sense.”

Dependent Claim 2 has been amended to recite “wherein the product designator for designating a subset enables a number N to be designated, and wherein the product designator selects no more than N products of the plurality of products to form the subset of products, and wherein the selected no more than N products has the largest impact on the optimization of prices of any subset of no more than N products of the plurality of products, and further wherein **the largest impact on the optimization is determined by ranking all products by a marginal contribution to the optimization and selecting the no more than N products by a mixed integer problem.**” (Emphasis Added).

Likewise, Dependent Claim 15 has been amended to recite “wherein the designating a subset comprises: allowing a number N to be designated; and selecting no more than N products of the plurality of products to form the subset of products, wherein the selecting no more than N products has the largest impact on the optimizing of prices of any subset of no more than N products of the plurality of products, and further wherein **the largest impact on the optimization is determined by ranking all products by a marginal contribution to the optimization and selecting the no more than N products by a mixed integer problem.**” (Emphasis Added).

Support for amendments to Dependent Claims 2 and 15 may be found in page 27, lines 10-19 of the Specification as filed, which states that “[t]he subset optimization may choose the products that **comprise this subset in a way that has the largest impact on the client’s objective function.** If, for example, the client’s objective is to maximize profit, it is desirable to populate the subset of products whose prices are allowed to change with those products that are most likely to have the largest impact on profit. In one way of doing this, **all of the available products may be ranked by their marginal contribution to the objective and then the subset of products whose prices are allowed to change is selected via mixed integer program. . .**” (Emphasis Added).

The amendments to Claims 2 and 15 clarify the process in which products are ranked by marginal contribution to the profit objective for the selection of the subset. Thus, the pending Claims 2 and 15 are definite as to the subject matter claimed. As such, Applicants believe that Claims 2 and 15 are in compliance with 35 U.S.C. 112.

Claims 1-6, 9-11, 14-19, 25-28, are rejected under 35 U.S.C. § 102(b) as being anticipated by Reuhl et al. (5873069).

For claims 1, 14, The Examiner cites “Reuhl discloses a method and system (with software) where product sales and price data is entered into a computer system and the system then ‘optimizes’ (optimization engine) the prices of numerous products based on the inputted sales data. The system is configured to find the best price for products, which is done to achieve a business goal. The system is optimizing in the sense that they are making the system determine the best price, which to Reuhl, is the lowest price. The software has a rule prioritizer with criteria (rules) for figuring out the final pricing of the products. **The rules include looking for sales prices, advertised prices, etc., as well as applying a cent code to the resulting lowest price, and then the rules check to ensure that the new active price with the cent code is not greater than the competitor price.** If the new price with the cent code results in the price being higher than the competitor price, then a new active price is calculated by incrementally relaxing the cent code rule (done by a rule relaxation module portion of the software) . . . **The rules are prioritized as claimed because the rules for figuring out prices look to various conditions and moves on to other conditions if prior conditions are not feasible** (result in the price being higher than the competitor). . . . Reuhl discloses a product designator configured to designate a subset of products. This is because **the computer system (software) only optimizes prices for products that have had new sales data entered into the system**, which is in the scope of what is claimed.” (Emphasis Added).

In addition, as discussed in the previous Amendment, Reuhl does not teach or suggest “optimizing prices for products in the subset of products, while maintaining the initial prices of all other products of the plurality of products, and wherein the optimizing of prices complies with the relaxed any infeasible rule of the plurality of rules” in the manner as recited by Claim 1. Support

can be found in page 3, lines 5-14, and page 21, lines 7-12 of the Specifications as filed.

Furthermore, Applicants reiterate their belief that Reuhl does not appear to teach a method of price optimization.

Instead, Reuhl appears to simply provide setting prices to a price lower than competitors' prices, and ending in the digit 9. (Column 6, lines 31-35, Column 11, lines 34-43 and Column 12, lines 34-37). Reuhl's system of price setting is single-faceted. The present invention is multi-faceted, and capable of providing an array of configurable optimization objectives, including profit optimization, sales optimization, revenue optimization and market share optimization. See page 9, lines 9-19, page 10, lines 12-13, page 15, line 17, and page 17 lines 3-10 of the Specification as filed. The method described in Reuhl does not appear to achieve this aim, but rather "**specifically, the price-changing function of the system is responsive to competitive price data on identical or substantially similar products.**" (Emphasis added). (Column 3, lines 58-61).

Further, the examiner states that Reuhl includes a plurality of rules that are prioritized. Applicants respectfully disagree because Reuhl appears to have only two criteria (1) the last digit ending in a nine, and (2) a lower price than the competitor. These criteria are static. For Reuhl to function both of these conditions must be actualized. As such Applicants suggest that Reuhl does not teach or suggest the "prioritize[ing] the plurality of relaxable rules" as claimed in Claim 1 and 14.

However, even if one were to consider Ruehl as disclosing a plurality of rules, Applicants assert that Reuhl does not disclose "a rule editor configured to set a plurality of relaxable rules, wherein the plurality of relaxable rules is set utilizing rule parameters, wherein the rule editor utilizes default values of the rule parameters, and further wherein the rule editor enables configuring of the rule parameters by a user" of Claim 1. Nor does Reuhl disclose "setting, using the computer system, a plurality of relaxable rules, wherein the setting of rules utilizes rule parameters, and wherein the rule parameters include default rule parameters and configured rule parameters" of Claim 14.

The criteria of Reuhl are not configurable by the user. As such Applicants respectfully traverse the rejection.

Base Claim 1 has been amended to recite: “a rule editor configured to set a plurality of relaxable rules, wherein the plurality of relaxable rules is set utilizing rule parameters, wherein the rule editor utilizes default values of the rule parameters, and further wherein the rule editor enables configuring of the rule parameters by a user; a rule prioritizer configured to prioritize the plurality of relaxable rules, and for identifying at least one lower priority infeasible rule from the plurality of relaxable rules; a rule relaxation module configured to incrementally relax any infeasible rule of the plurality of relaxable rules which has a lower priority than the at least one lower priority infeasible rule, enabling the at least one lower priority infeasible rule to become feasible; a database configured to store initial prices for a plurality of products; a product designator configured to designate a subset of products of the plurality of products, wherein the number of products in the subset of products is less than the number of products in the plurality of products; and an optimization engine configured to optimize prices for products in the subset of products, while maintaining the initial prices of all other products of the plurality of products and wherein the optimizing of prices complies with the relaxed any infeasible rule of the plurality of rules.”

Likewise, Base Claim 14 has been amended to recite: “setting, using the computer system, a plurality of relaxable rules, wherein the setting of rules utilizes rule parameters, and wherein the rule parameters include default rule parameters and configured rule parameters; prioritizing, using the computer system, the plurality of relaxable rules; identifying, using the computer system, at least one lower priority infeasible rule from the plurality of relaxable rules; incrementally relaxing, using the computer system, any infeasible rule of the plurality of rules which has a lower priority than the at least one lower priority infeasible rule to allow the at least one lower priority infeasible rule of the plurality of rules to become feasible; storing, using the computer system, initial prices for a plurality of products; designating, using the computer system, a subset of products of the plurality of products, wherein the number of products in the subset of products is less than the number of products in the plurality of products; and optimizing, using the computer system, prices for products in the subset of products, while maintaining the initial prices of products of the plurality of products

that are not in the subset of products, and wherein the optimizing of prices complies with the relaxed any infeasible rule of the plurality of rules.”

Support for amendments to Base Claims 1 and 14 may be found on page 14, lines 17-22 which states “In operation, the client (stores 124) may access the rule editor 412 of the support tool 116 and provides client defined rule parameters (step 228). If a client does not set a parameter for a particular rule, a default value is used. Some of the rule parameters set by the client may be constraints to the overall weighted price advance or decline, branding price rules, size pricing rules, unit pricing rules, line pricing rules, and cluster pricing rules.”

Additionally, Dependent Claim 29 has been added which states “wherein the rule editor enables configuration of at least one of group price change, brand pricing rules, size pricing rules, unit pricing rules, line pricing rules, cluster pricing rules, gross margin rule, store volume rule and competition rules.”

Likewise, Dependent Claim 30 has been added which states “wherein the rule parameters includes at least one of group price change, brand pricing rules, size pricing rules, unit pricing rules, line pricing rules, cluster pricing rules, gross margin rule, store volume rule and competition rules.”

Support for the added Dependent Claims 29 and 30 may be found on page 16, line 9 to page 20, line 17 which states “These constraints are rules that provide limitations to price or other changes . . . Group price advance or decline . . . Brand Pricing Rules . . . Size Pricing Rules . . . Unit Pricing Rules . . . Line Pricing Rules . . . Cluster pricing . . . a gross margin rule, a store volume rule, or a competition rule.”

In sum, Claims 1-4, 9, 14-19, 25-28 remain in this application and are now believed to be allowable. Base Claims 1 and 14 have also been amended and are now believed to be allowable. Dependent Claims 2,3,15, and 16 have been amended and are now believed to be allowable. Dependent Claims 2-4, 9, 15-19, 25-30 which depend therefrom are also believed to be allowable as being dependent from their respective patentable parent Claims 1 and 14 for at least the same reasons. Hence, Examiner's rejection of dependent Claims 2-4, 9, 15-19, 25-28 are rendered moot in view of the amendment to base Claims 1 and 14. Applicants believe that all pending Claims 1-4, 9, 14-19, 25-30 are now allowable over the cited art and are also in allowable form and respectfully request a Notice of Allowance for this application from the Examiner. The commissioner is authorized via EFS (credit card) the amount of \$120.00 to cover the one-month extension fee. The commissioner is authorized to charge any fees that may be due to our Deposit Account No. 50-2766 (Order No. DEM1P009). Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at telephone number 925-570-8198.

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